Title (en)
WEIGHT FILLING MACHINE FOR BOTTLES

Title (de)
VORRICHTUNG ZUR GEWICHTSFÜLLUNG FÜR FLASCHEN

Title (fr)
MACHINE DE REMPLISSAGE PONDERAL POUR BOUTEILLES

Publication
EP 1072511 B1 20041208 (EN)

Application
EP 00107979 A 20000418

Priority
JP 21208899 A 19990727

Abstract (en)
[origin: EP1072511A1] A weight filler 6 is provided which allows a bottle 16 to be conveyed while gripping its neck 16a. Load cell 58 is mounted around the outer periphery of a revolving body 54 in order to detect a vertical load. A horizontal rod or load applicator 64 projects radially outward from the load cell 58. A gripper 50 which grips the bottle 16 under the resilience of tension springs 82 is mounted on the free end 64a of the rod 64. As the bottle 16 is urged into the gripper 50 in a direction opposite from the direction in which the rod 64 projects, the gripper 50 is once opened against the tension springs 82 and then closed to grip the neck 16a of the bottle 16. A filling nozzle 52 is disposed above the bottle 16 which is gripped by the gripper 50, and fills the bottle 16 with liquid. During the filling operation, the load cell 58 detects a load applied, thus allowing a filling of a given amount in accordance with the detection. <IMAGE>

IPC 1-7
B65B 3/28; B67C 3/20; B67C 3/24

IPC 8 full level
B65B 3/04 (2006.01); B65B 3/28 (2006.01); B67C 3/20 (2006.01); B67C 3/24 (2006.01)

CPC (source: EP KR US)
B65B 3/28 (2013.01 - EP KR US); B65B 39/08 (2013.01 - KR); B65B 39/145 (2013.01 - KR); B67C 3/202 (2013.01 - EP US); B67C 3/242 (2013.01 - EP US); B67C 3/202 (2013.01 - KR); B67C 3/242 (2013.01 - KR)

Cited by
FR2981914A1; CN103922263A; EP1243546A3; US8151544B2; FR2900127A1; DE102008060379A1; CN105565234A; CN105712273A; EP3103760A1; RU2632292C1; WO2018166714A1; WO2009016499A3; WO2008116526A3; WO2008009410A1; WO2013060873A1; US10766716B2; US8288668B2; US10294091B2; US11679971B2; WO2004014779A1; US7278451B2; US6644363B2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1072511 A1 20010131; EP 1072511 B1 20041208; DE 60016514 D1 20050113; DE 60016514 T2 20051215; JP 2001039493 A 20010213; JP 4452904 B2 20100421; KR 100363391 B1 20021202; KR 20010069190 A 20010723; US 6399901 B1 20020604

DOCDB simple family (application)
EP 00107979 A 20000418; DE 60016514 T 20000418; JP 21208899 A 19990727; KR 20000023619 A 20000503; US 55840200 A 20000425